

IN THE CLAIMS

1-21 (canceled)

22. (currently amended) A method of forming an anode for a zinc/air cell having an anode cavity therein, comprising the step of:

a) forming a wet mixture comprising zinc particles, a binder comprising ~~an alcohol such as~~ polyvinylalcohol and a gelling agent, and water;

a.1) inserting said wet mixture into a mold cavity;

a.2) applying pressure to said wet mixture in said mold cavity thereby compacting said wet mixture within said mold cavity;

a.3) ejecting said compacted wet mixture from said mold cavity thereby producing a molded wet mixture having a molded shape, whereupon said molded wet mixture retains its molded shape;

b) drying ~~[[the]]~~ said molded wet mixture to evaporate ~~at least a portion of the~~ water therein and thereby producing a ~~dimensionally stabilized~~ dry solid mass comprising said zinc particles, said solid mass retaining its molded shape;

c) inserting said ~~dimensionally stabilized~~ solid mass into the anode cavity of a zinc/air cell; and

d) adding ~~a fluid~~ an aqueous alkaline electrolyte to the anode cavity whereby said ~~[[fluid]]~~ aqueous electrolyte is absorbed by said solid mass, said aqueous electrolyte activates said gelling agent, and thereby forms said anode.

23. (canceled)

24. (currently amended) The method of claim 22 wherein said ~~dimensionally stabilized~~ solid mass is a solid porous mass comprising zinc particles.

25. (currently amended) The method of claim 24 wherein said solid porous mass expands as said ~~[[fluid]]~~ aqueous electrolyte is absorbed therein in step (d).

26. (currently amended) The method of claim 22 wherein said mixture is molded into a designated shape conforming to the shape of said mold cavity prior to drying said mixture.

27. (currently amended) The method of claim ~~[[23]]~~ 22 wherein the aqueous alkaline electrolyte comprises potassium hydroxide.

28. (currently amended) The method of claim 22 wherein said drying in step b) is effected by heating said wet mixture.

29. (original) The method of claim 22 wherein the polyvinylalcohol has a molecular weight between about 85000 and 146000.

30. (canceled)

31. (original) The method of claim 22 wherein said binder further comprises a crosslinked acrylic acid polymer gelling agent.

32. (original) The method of claim 22 wherein said binder further comprises a gelling agent comprising a starch graft copolymer of polyacrylic acid and polyacrylamide.

33. (canceled)

34. (canceled)

35. (original) The method of claim 22 wherein said mixture prior to drying further comprises indium in total amount between about 200 and 1000 ppm of the zinc.

36. (original) The method of claim 22 wherein said mixture prior to drying further comprises a surfactant.

37. (original) The method of claim 36 wherein said surfactant comprises an organic phosphate ester.

38. (original) The method of claim 24 wherein said solid porous mass has the property that it is storable in ambient air.

39. (currently amended) The method of claim 22 wherein said wet mixture is molded in said mold cavity into the approximate shape of the anode cavity of a zinc/air cell prior to drying said mixture.

40. (Withdrawn) A zinc/air cell comprising a housing, a positive and a negative terminal; an anode comprising zinc and polyvinylalcohol; an aqueous alkaline electrolyte solution; a separator; and a cathode.

41. (Withdrawn) The cell of claim 40 wherein said cell is a primary zinc/air cell.

42. (Withdrawn) The cell of claim 40 wherein the aqueous electrolyte comprises potassium hydroxide.

43. (Withdrawn) The cell of claim 40 wherein the polyvinylalcohol has a molecular weight between about 85000 and 146000.

44. (Withdrawn) The cell of claim 40 wherein the cathode comprises manganese dioxide.

45. (Withdrawn) The cell of claim 40 wherein the zinc comprises zinc particles having a mean average particle size between about 30 and 1000 micron.

46. (Withdrawn) The cell of claim 40 wherein the zinc comprises zinc particles having a mean average particle size between about 30 and 400 micron.

47. (Withdrawn) The cell of claim 40 wherein said anode further comprises a binder comprising a gelling agent comprising a crosslinked acrylic acid polymer.

48. (Withdrawn) The cell of claim 40 wherein said anode further comprises a binder comprising a gelling agent comprising starch graft copolymer of polyacrylic acid and polyacrylamide.

49. (Withdrawn) The cell of claim 40 wherein said anode further comprises a surfactant.

50. (Withdrawn) The cell of claim 49 wherein said surfactant comprises an organic phosphate ester.

51. (Withdrawn) The combination of an anode can for a zinc/air cell and a porous mass inserted into said anode can, said mass comprising zinc particles bound together forming a network of zinc particles with void spaces therebetween, said mass being dimensionally stabilized.

52. (Withdrawn) The combination of claim 51 wherein said mass is a solid porous mass.

53. (Withdrawn) The combination of claim 52 wherein said solid porous mass is at least substantially dry.

54. (Withdrawn) The combination of claim 53 wherein said mass has a separator material applied to at least one surface of said mass.

55. (Withdrawn) The combination of claim 54 wherein said separator material adheres to said solid mass.

56. (Withdrawn) The combination of claim 52 wherein said solid porous mass at least substantially fills said anode can.

57. (Withdrawn) The combination of claim 51 wherein said network of bound zinc particles extends at least substantially throughout said mass.

58. (Withdrawn) The combination of claim 57 wherein said zinc particles is uniformly distributed within said network.

59. (Withdrawn) The combination of claim 51 whererin said mass has a porosity of between about 25 and 50 percent by volume.

60. (Withdrawn) The combination of claim 51 wherein polyvinylalcohol coats a portion of the surface of said zinc particles thereby binding said zinc particles together forming said network of zinc particles.

61. (Withdrawn) The combination of claim 60 wherein said polyvinylalcohol has a molecular weight between about 85000 and 146000.

62. (Withdrawn) The combination of claim 51 further comprising a binder comprising acrylic acid polymer between said zinc particles.

63. (Withdrawn) The combination of claim 51 further comprising a surfactant.

64. (Withdrawn) The combination of claim 63 wherein said surfactant comprises an organic phosphate ester.

65. (Withdrawn) The combination of claim 51 wherein said zinc particles have a mean average size of between about 30 and 1000 micron.

66. (Withdrawn) The combination of claim 51 wherein said zinc particles have a mean average size of between about 30 and 400 micron.

67. (Withdrawn) The combination of claim 51 wherein said mass further comprises indium in total amount between about 200 and 1000 parts by weight indium per million parts zinc.

68. (New) The method of claim 22 wherein said pressure applied to said wet mixture in step a.2 corresponds to a force of between about 10 and 300 pounds applied by a plunger to said wet mixture in said mold cavity being cylindrical and having a diameter between about 3 and 7 mm, thereby compacting said wet mixture within said mold cavity.